Applicant: Kimihiro Mabuchi et al. Attorney's Docket No.: 19461-0002US1 / 542027

Serial No.: 10/559,544 Filed: March 29, 2006

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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

- (Currently Amended) A polysulfone type selectively permeable hollow fiber membrane comprising a polysulfone-based type resin and a hydrophilic polymer as main components, eharaeterized in that wherein
- (A) the content of the hydrophilic polymer in the uppermost layer of a <u>an inner</u> surface of the polysulfone type hollow fiber membrane on the blood contacting side is at least 1.1 times larger than the content of the hydrophilic polymer in the proximate layer of said <u>inner</u> surface on the blood-contacting side, and
- (B) the content of the hydrophilic polymer in the uppermost layer of the other surface of the polysulfone type an outer surface of the hollow fiber membrane, i. e., the reverse side of the surface on the blood contacting side, is at least 1.1 times larger than the content of the hydrophilic polymer in the uppermost layer of said inner surface on the blood contacting side.
- 2. (Currently Amended) The hollow fiber membrane of claim 1, wherein said uppermost layer of the <u>inner</u> surface of the <u>polysulfone type</u> hollow fiber membrane on the blood contacting side is a layer between the blood contacting <u>inner</u> surface and a position present at a depth of 10 nm from the blood-contacting <u>inner</u> surface, and wherein said proximate layer is a layer between the blood-contacting inner surface and a position present at a depth of 1,000 to 1,500 nm (1 to 1.5 µm) from the blood-contacting inner surface.

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3. (Currently Amended) The hollow fiber membrane of claim 1, wherein the content of the hydrophilic polymer in the polysulfone type hollow fiber membrane is 20 to 40 mass % at the uppermost layer of the inner surface of the membrane on the blood-contacting-side, 5 to 20 mass % at the proximate layer thereof, and 25 to 50 mass % at the uppermost layer of the other

outer surface of the membrane, i. e., the reverse side of the surface on the blood contacting side,

(Currently Amended) The hollow fiber membrane of claim 1, comprising 99 to 80
mass % of the polysulfone-based type resin and 1 to 20 mass % of the hydrophilic polymer as the

main components.

5. (Previously presented) The hollow fiber membrane of claim 1, wherein the

hydrophilic polymer is polyvinyl pyrrolidone.

 (Previously presented) The hollow fiber membrane of claim 1, wherein the amount of the hydrophilic polymer eluted from the hollow fiber membrane is 10 ppm or less,

7. (Previously presented) The hollow fiber membrane of claim 1, wherein the rate of

pore area of the outer surface of the hollow fiber membrane is 8% to less than 25%.

8. (Previously presented) The hollow fiber membrane of claim 1, wherein the

hydrophilic polymer is crosslinked so as to be insoluble in water.

9. (Currently Amended) The hollow fiber membrane of claim 1, for use in a- \underline{A}

blood purifier comprising at least one hollow fiber membrane of claim 1.